

REMARKS

Applicants respectfully traverse and request reconsideration.

Applicants wish to thank the Examiner for notice to claims 6-8 are allowed.

Applicants respectfully cancel claims 5 and 14-16 without prejudice. Applicants have amended claims 3-4, 6-8, 10-12 and 17-21 to correct various typographical errors and provide proper antecedent basis throughout the claims. Additionally, Applicants have amended various portions of the written description to correct similar typographical errors. Applicants respectfully submit that no new matter has been added in the aforementioned amendments.

Claims 2-5, 10-12 and 14-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,945,997 to Zhao et al. ("Zhao") in review of the U.S. Patent No. 6,483,519 to Long et al. ("Long"). As stated in the Office Action, Zhao does not disclose scanning a pixel within a primitive while using a look-ahead module to process a next pixel. (Office Action, p. 3). Instead, Zhao determines the end of a span by determining the position of a currently selected pixel and does not use a next look-ahead module to examine and process a next pixel to determine whether the next pixel is within the graphic primitive. Because Zhao discloses a current pixel evaluation scheme rather than a look-ahead pixel evaluation scheme as claimed, Applicants respectfully submit that Zhao teaches away from Applicants' claimed subject matter.

While Zhao fails to teach or suggest a scan module that successively scans a current pixel previously identified as being within the graphic primitive by a look-ahead module *while* the look-ahead module successively processes a next pixel using the edge functions and determines if the next pixel is within the graphic primitive, the Office Action cites column 11, lines 50-53, the abstract and the edge processing module (Fig. 4, element 400) of Long as teaching Applicants' claimed subject matter. However, Applicants respectfully submit that at most, the edge processing module assists in determining coordinates for each scan line indicating an intersection of an edge of a graphic object with a scan line (*See* Long, Abstract), but fails to use both a scan module and a look-ahead module wherein the look-ahead module processes a next pixel to determine if it is within the graphic primitive as claimed.

As explained in Long, the edge processing module uses an edge record store to hold the edge information which is carried forward from scan-line to scan-line. (Col. 10, ll. 32-34). For instance, the pixel sequential rendering apparatus (Fig. 2, element 20) may include an instruction executor (element 300) and an edge processing module (element 400) and other processing modules

for processing graphic objects. During a scan line render operation, the reference explains that a NEW_EDGES_AND_RENDER instruction from a instruction stream may be read, processed and transferred by the instruction executor to, for instance, the edge processing module. (Col. 11, ll. 50-53; col. 10, ll. 59-64). The particular instruction is associated with an address of new edges which are to be introduced into the rendering process when a next scan line is rendered. Upon receipt, the edge processing module stores the address of the new edges in the edge record store (Fig. 3, element 32) prior to the system rendering pixels associated with the next scan line. (Col. 11, ll. 18-.32).

Applicants respectfully submit that the cited portions of Long appear to be directed toward passing data associated with new edges which are to be introduced into the rendering process for a next scan line and does not appear to teach or suggest Applicants' claimed subject matter wherein a look-ahead module successively processes a next pixel using the edge functions (e.g., values E0, E1, and E2) to determine if the next pixel is within the graphic primitive while a scan module processes a current pixel. Because the edge processing module of Long does not appear to process any pixels using edge functions and furthermore does not appear to teach determining whether a next pixel is within or outside a graphic primitive, Applicants respectfully submit that no combination of Zhao and Long teaches or suggest each claim limitation of Applicants' claimed subject matter. Accordingly, Applicants respectfully submit claim 17 for allowance. If the Examiner maintains this rejection, Applicants respectfully request a showing indicating, by column and line number, where Long teaches a look-ahead module that successively processes a next pixel using edge functions to determine if the next pixel is within the graphic primitive.

For the aforementioned reasons, Applicants similarly submit that claims 20 and 21 are also in proper condition for allowance because, among other things, no combination of the cited references teaches or suggests processing a current pixel while looking ahead to determine if a next pixel is within the graphic primitive.

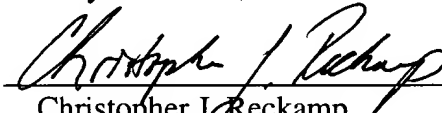
Claims 2-4, 10-12, 14, 16, and 18-19 depend upon allowed base claims 17 and 20 and contain novel, non-obvious and otherwise patentable subject matter not present in the cited prior art. Therefore, the aforementioned claims are also believed to be in condition for allowance.

Applicants respectfully submit that the claims are in condition for allowance and respectfully request that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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By:



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